

1. A gate for attachment to a base unit mounted adjacent a traffic path to block traffic flow along the traffic path, said gate comprising:

- A) a first hollow member affixed to the base for limited rotation between open and blocking positions,
- B) a second member in the first hollow member being displaced along an extension axis for a displacement distance, and
- C) a stop member internally of said first hollow member defining the limits of the displacement distance whereby in the open position said second member nests in said first hollow member and in the blocking position said second member extends from said first hollow member to a position determined by said stop member thereby to block traffic flow along the traffic pathway.

2. A gate as recited in claim 1 wherein said first and second members rotate about the base between a open position with the axis in a substantially vertical orientation and a blocking position with the axis sloping downward from the base.

3. A gate as recited in claim 2 wherein said first hollow member includes a support structure for said second member and said support structure includes a plurality of axially spaced

bearing means for minimizing sliding friction between said first and second members.

4. A gate as recited in claim 3 wherein said support structure forms an inclined ramp with a maximum thickness proximate the base and a plurality of axially spaced bearings for rotation about bearing axes that are perpendicular to the extension axis, said second member extending when said first member is in a substantially horizontal position.

5. A gate as recited in claim 3 wherein said support structure comprises a plurality of axially spaced bearing sets mounted to said first member for circumscribing said second member, each bearing set having a plurality of angularly spaced bearings that rotate about bearing axes that are perpendicular to the extension axis, said second member extending when said first member inclines downward from the base.

6. A gate as recited in claim 2 wherein said stop member includes a first stop element affixed to the interior portion of said first member and a second stop element affixes to an outer portion of said second member.

7. A gate as recited in claim 2 additionally comprising a second stop member in the first member proximate the base

thereby to limit the motion of the second member when the extendible gate moves to the open position.

8. A gate as recited in claim 2 wherein the base includes a source of electrical power, said extendible gate additionally comprising an electrical heater and thermostat that prevent the formation of ice within the extendible gate.

9. A gate as recited in claim 2 wherein said second member includes visual annunciators spaced along the length thereof.

10. A gate as recited in claim 9 wherein the base includes a source of electrical power and said visual annunciators include electric lights embedded in said second member.

11. A gate as recited in claim 10 additionally comprising a plurality of electric lights on the exterior of said first member.

12. A gate as recited in claim 2 additionally comprising an end structure on the end of second member that is remote from the base, said end structure including a rotatable foot the engages the ground at the traffic path when said extendible gate is in the blocking position.

13. A gate as recited in claim 2 wherein each of said first and second members are formed as extruded structures.

14. A railroad crossing gate comprising for blocking a highway comprising:

- A) a base unit mounted in the ground adjacent the highway and having a source of electrical power, a rotatable arm and an electrically operated motor for rotating said arm between an open position and a blocking position, and
- B) a gate including:
 - i) a hollow member having a first end affixed to said arm whereby said hollow member rotates between the open and blocking positions with said arm,
 - ii) an extendible member in the first hollow member slidable from an inner position to an outer position relative to said hollow member along an extension axis, and
 - iii) a stop that defines the outer position of said extendible member whereby in the open position said extendible member nests in said hollow member and in the blocking position said extendible member extends from said hollow member to the outer position thereby to block a

traffic on the highway from the railroad crossing.

15. A railroad crossing gate as recited in claim 14 wherein said hollow member includes a support structure for said extendible member and said support structure includes a plurality of axially spaced bearing means for minimizing sliding friction between said hollow and extendible members.

16. A railroad crossing gate as recited in claim 15 wherein said support structure forms an inclined ramp with a maximum thickness proximate said arm and a plurality of axially spaced bearings for rotation about bearing axes that are perpendicular to the extension axis.

17. A railroad crossing gate as recited in claim 15 wherein said support structure comprises a plurality of axially spaced bearing sets mounted to said hollow member for circumscribing said extendible member, each bearing set having a plurality of angularly spaced bearings that rotate about bearing axes that are perpendicular to the extension axis.

18. A railroad crossing gate as recited in claim 14 wherein said stop member includes a first stop element affixed to the

interior portion of said hollow member and a second stop element affixes to an outer portion of said extendible member.

19. A railroad crossing gate as recited in claim 14 additionally comprising a second stop member in said hollow member proximate said arm thereby to limit the motion of said extendible member when the gate moves to the open position.

20. A railroad crossing gate as recited in claim 14 additionally comprising a heater and thermostat that prevent the formation of ice within said hollow member.

21. A railroad crossing gate as recited in claim 14 wherein said extendible member includes visual annunciators spaced along the length thereof.

22. A railroad crossing gate as recited in claim 14 wherein said visual annunciators include electric lights embedded in said extendible member.

23. A railroad crossing gate as recited in claim 22 additionally comprising a plurality of electric lights on the exterior of said hollow member.

24. A railroad crossing gate as recited in claim 14 additionally comprising an end structure on the end of said extendible member that is remote from said arm, said end structure including a rotatable foot the engages the ground at said traffic path when said extendible gate is in the blocking position.

25. A railroad crossing gate as recited in claim 14 wherein each of said first and second members are formed as extruded structures.